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Riding the Long Wave

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Robert Brenner's contribution to the history of post-war capitalism provides a stimulating basis for the opening of a debate on this subject. I will begin with some critical remarks before putting forward a number of alternative propositions on the functioning of contemporary capitalism.[1]

A debatable conception of competition

Much of Brenner's analysis rests on a theoretical model in which the rate of profit declines in proportion to a fall in prices brought about by competition. In my view, this model is not really compatible with the law of value, nor with the concrete functioning of capitalism.

The development of social productivity obviously reduces the expenditure of social labour necessary for the production of a given commodity, and consequently its price. But why should this necessarily lead to a fall in the rate of profit? Brenner assumes this link to be practically self-evident, because he argues at the level of a branch. However, at the level of society taken as a whole, if the same amount of goods is produced with a reduced expenditure of labour, then surplus labour increases in proportion to social labour and with it the rate of exploitation. The application of productivity to a set of use-values produces what Marx calls relative surplus-value. Consequently, the rate of profit should increase, unless this gain in productivity has only been achieved through a still more considerable expenditure in fixed capital, or again if real wages have meantime risen more quickly than productivity. This is moreover what Brenner says:

> The outcome, so long as workers do not secure all of the gains from the reduced price in the form of increased real wages, will be an increase in the rate of profit for the economy as a whole. (p.25)

Brenner's paradoxical result stems from a method of argument centred on internal competition in a branch producing a given good. The unit price of this good is obtained, briefly, by dividing the amount of social labour necessary to its production by the volume of

[1] Brenner 1998.

goods produced. If this latter remains identical, then any gain in productivity reduces the unit price, because the amount of necessary labour is reduced. But this means that the branch shrinks and that its profit will fall because of the fall in the volume of variable capital subject to exploitation. The generalisation of this scenario leads to an obvious sophism, except in the particular case where productivity gains are combined with zero growth in all the compartments of production.

Even in this case, the result will not necessarily be a reduction in the rate of exploitation, to the extent that variable capital and surplus-value would have fallen in a proportional manner. There would be a fall in the rate of profit, but this latter would not result from increased productivity but from a very particular configuration, with productivity gains and zero growth. In other words, Brenner's argument does not take account of the dynamic of accumulation and reproduction of capital. His reasoning in fact assumes partial equilibrium.

A charge of this gravity merits being supported by a more detailed account of Brenner's argument, which is summed up in the following passage:

> With respect to the higher-cost firms who remain, then, the 'normal' process of adjustment – whereby higher-cost firms leave the line and are replaced by lower-cost producers – simply does not occur, because of those firms' possession of fixed capital. The line's output now has the lower price imposed by the cost-cutting entrant. Its population consists of the cost-cutting firm making the old rate of profit on the basis of its reduced production costs plus the firms that have failed to cut costs having to take a reduced profit rate. Technically speaking, as a result of the lower-cost firm's appropriation of market share through the imposition of its lower price, over-investment leading to over-capacity and over-production has arisen in the line, again with respect to the previously and still prevailing rate of profit. Some higher-cost firms have been obliged to scrap fixed capital because they have lost market share; for the same reason, those higher-cost incumbents who remain have been able to hold onto their place (meet some of the demand) only by selling their goods at less than the old rate of return. The outcome is that, rather than leading to a higher rate of profit, the entry of a lower-cost, lower-price producer brings about a lower rate of profit in the line. The line is nonetheless 'in equilibrium' and no further transition can be expected to take place for the time being since all of its

> incumbents are presumably making the best profit rate they can. The line's reduced profit rate is typically registered both in a declining output-capital ratio and a declining profit share, because, in arithmetical terms, it is simply the result of the higher-cost firms' inability to raise their prices sufficiently over their (given) capital and wage costs due to the insufficient demand for their goods. (p. 22)

This passage summarises the postulates of the model well. One of the most important is that it is the cost-cutting entrants who fix the price. This assumption is very debatable, for the formation of the market price depends largely on the supply structure. In the most general case, it is the 'modal' rather than the marginal conditions of production that are taken as reference.[2] Why? Because the lower-cost firms cannot, owing to their size, satisfy all the demand, or even a sufficient proportion of it. What is considered as socially necessary labour at a given moment corresponds to the average conditions of production. The same reasoning must be applied to fixed capital, which Brenner correctly makes a key element of valorisation. This relates to a very much more theoretical debate on the transformation of values into prices where a good part of the discussion turns around the valorisation of fixed capital as law of transmission of value. The question is raised also of whether it is the marginal conditions which instantaneously devalorise the capital installed. Does the more efficient and less costly machine employed today annul, at least in part, the possibility of amortising the old machine, in other words incorporating its value into commodities? Here again, the answer turns on the notion of socially necessary labour. If old machines are needed to satisfy demand, then this dead labour is socially necessary. In other words, socially necessary labour is not defined solely by the optimal conditions of production, but also according to the adequacy of supply and demand, and this at a level which should not be confined to a branch analysis. This point is often neglected, as if the introduction of social demand was illegitimate in a study of the conditions of valorisation of capital. If such an articulation needs to be supported, Marx can be quoted at this point:

> If a commodity is to be sold at its market value, i.e. in proportion to the socially necessary labour contained in it, the total quantity of social labour which is applied to produce the overall amount of this kind of commodity must correspond to the quantity of social need for it, i.e. to the social need with money to back it.[3]

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[2] Carchedi 1991.
[3] Marx 1981, p. 294.

Inflation forgotten

Brenner's argument accords an important role to the fall in prices, and thus profit, which results from competition. But how is this schema compatible with inflation? One of the essential characteristics of the post-war expansion was precisely a continuous and historically unprecedented growth in the general level of prices. To pass over this in silence is equivalent to adopting a dichotomic position disassociating the formation of unit prices from the determination of the general level of prices. In reality, this process of permanent inflation has its origin in two developments: the increased weight of the monopolies tending to reduce the effects of price competition (from whence the notion of 'monopolist regulation')[4] and the growing socialisation of a system of credit assuring the creation of paper money as permissive condition of this continuous rise in price levels. For the regulationists, inflation is a specific form of financing and 'ante-validation' of capital accumulation, an element in sum of socialisation and even of regulation of capitalist competition. In a remarkable article Aglietta sums up these new traits as follows:

> The weakening of the constraint of payment for the engagement of capital gives devalorisation a continued appeal and thus avoids the breakdown of the system of growth, but it challenges the function of the currency as reserve value and sustains a more fundamental threat, that of a destruction of the confidence in the currency on which the functioning of the economic system rests.[5]

However, the regulationist approach misreads the contradictory aspects, in contrast for example to Mandel who writes the following:

> The role of the permanent inflation of late capitalism in concealing the decline of commodity values, facilitating the accumulation of capital, disguising the rise in the rate of surplus-value and temporarily solving the difficulties of realization by its extension of credit, thus ultimately encounters impassible limits. Creeping inflation then ceases to be functional, or turns into galloping inflation.[6]

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[4] Boyer 1977.
[5] Aglietta 1980.
[6] Mandel 1975, p. 437.

The transformation predicted here has effectively taken place and inflation has lost all functionality, becoming instead a target for neoliberal policies (though the real target was wages). In Brenner's general logic, where inter-capitalist competition predominates, this transformation has no great meaning.

The crisis as crisis of the world economy

One of the most fruitful aspects of Brenner's contribution is its recognition of inter-capitalist contradictions as an element of a general crisis theory. This aspect is too often neglected in favour of a juxtaposition of national analyses or even an ignorance of national specificities. But Brenner pushes this logic too far, to the extent that he puts forward a monocausal explanation: competition between capitals, principally at the international level, is at the root of the crisis. This line of argument is pushed to the limit, at the risk of a contradiction in the arguments concerning the theory of 'catching up'. It is precisely this thesis which underlies Brenner's analysis of competition emanating from Europe and Japan:

> Meanwhile, certain of the later developing blocs of the international economy, focused on Japan and Germany – and, later, parts of east Asia – benefited by exploiting the potential advantages of being followers technologically, less developed socio-economically, and internationally hegemonized. It was the combination of and interaction between the older and later developing blocs that largely determined both the character of the long boom and the nature of the long downturn to which it gave rise. (p. 35)

This classic formulation of the theory of 'catching up' is completed by a precise indication of how the catching up took place:

> The German and Japanese economies were, it must be stressed, able to turn their impressive growth trajectories into spectacular ones only by virtue of their ability to capture, mostly from US (and UK) producers, increasing shares of an international market that was growing at least half again as fast as rapidly advancing world production. In this sense, the followers could develop as successfully as they did only by virtue of their international economic relationship with the leader, specifically its markets. (p. 35)

'Only by virtue': the insistence on this formula reveals the systematic bias of Brenner's analysis. In reality, Europe's post-war growth was based on a considerable development of the internal market which reflected an equally spectacular accumulation of capital. Brenner argues that this explanation is in itself insufficient:

> While the Japanese and the German economies may have founded their economic dynamism on their ability to develop the home market, they were able to achieve such impressive growth trajectories only by maximizing the growth of exports, and their ability to appropriate markets formerly held by the US (and UK) producers turned out to be decisive. (p.46)

All these quotations reveal that Brenner's thesis is not being caricatured and that it is rendered very questionable by its reliance on an absolute formulation. That the post-war period was accompanied by a modification of relative market shares is obvious. But it is an abusive simplification to argue that growth in Europe and Japan can only be explained by the capacity of these countries to penetrate the market share of the United States, and the rare figures provided by Brenner himself illustrate why (see Table 1). It can be seen, for example, that the share of exports in the United States' GDP is very similar to that of Japan, whether in terms of level or in evolution. This being the case, why would the world market benefit Japan and not the United States? It should also be stressed that these two economies were relatively closed, which would make it difficult for external variables to play a decisive role. Europe was very much more open to the world market and this degree of openness increased strongly over the period. But, in this progression, we can isolate a very strong growth of intra-European exchanges which corresponds more to the constitution of a dense internal market than to the conquest of external markets.

Table 1. Export shares of GDP

	1950	1965	1973
OECD Europe	12.7	18.1	25.6
US	4.3	5.1	6.9
Japan	4.7	5.6	7.9

Source : Brenner, Table 8, p. 104

Later in his contribution, Brenner relativises his introductory propositions by relativising the role of catch-up.

> [I]t was heavily supplemented by large-scale, 'indigenous' technological improvements in the follower economies themselves, advances which emerged from learning-by-

> doing which was a by-product of their unusually high levels of investment in new plant and equipment. (p. 244)

It may be seen then that Brenner oscillates between two theses on the impact of catch-up in the dynamic of post-war capitalism. But his presentation has in any case the advantage of introducing an explanatory dimension fundamental to the understanding of the inter-capitalist restructuring carried through in the mid-1980s. He is, for example, perfectly correct to present the Plaza Accord of 1985 as an essential turning point establishing the supremacy of the United States. This supremacy rests firstly on a virtually guaranteed financing of the US external deficit. Thus, during the last 1991–98 cycle, the United States accumulated a considerable deficit of $9,000 billion overall, $229 billion for the year 1998 taken alone. Over the same period, Japan on the contrary recorded surpluses totalling $8,300 billion, while the European Union's surplus was $2,400 billion. Over the recent period, the European surplus has grown closer to that of Japan (respectively $121 billion and $115 billion in 1998). In short, the growing United States deficit is financed by the Japanese and European surpluses.

The second element of United States domination resides in its capacity to obtain this financing in spite of a medium term depreciation of its currency. The turn at the beginning of the 1980s, with interest rates rising sharply, was initially accompanied by a very marked real appreciation of the dollar, which rose in value by nearly 50 per cent between 1980 and 1985. This had the effect of deepening the US external deficit, which then exceeded 3 per cent of GDP, quite considerable given the weak degree of openness of the economy. In September 1985, the Plaza Accord concluded between the five main economic powers led to a considerable *de facto* devaluation of the dollar, imposed on the other countries in the name of international monetary co-ordination. Over the three years from 1985–88, the yen appreciated by 46 per cent, the mark by 40 per cent, the franc by 37 per cent, and the pound by 28 per cent. The relative competitiveness of US products was accordingly considerably boosted. What about growth? Again over this 1991–98 period, the United States recorded a rather satisfying, albeit unexceptional, average growth rate of 3.1 per cent. Meanwhile, Japan stagnated at 0.8 per cent annual growth, while the European Union could only manage an average growth rate in GDP of 1.8 per cent. The share of the United States in the GDP of the six main countries rose from 45.3 per cent to 47.4 per cent (and that in employment from 39.1 per cent to 41.9 per cent). The US unemployment rate fell by 2.2

points over this period, while it increased by 2.1 points in Japan and by 2.2 points in the European Union.

This represents more than a simultaneity: the division of the growth of the world economy among the powers has become very sensitive to monetary relations. The 14 per cent appreciation in the dollar's value which followed what Brenner calls the 'reverse Plaza Accord' of spring 1995 (p. 257) was enough to stimulate economic activity in Europe, principally through exports. This is an indication of the sensitivity to the dollar/euro exchange rate which is the material basis of foreseeable tensions between the United States and Europe, to which Brenner correctly draws attention. On the other hand, it is not possible to follow him in privileging this aspect and relativising all the other factors of evolution in the rate of profit.

The evolution of the rate of profit and its determinants

One of the curiosities of Marxist economic analysis is its tendency to discuss the fall in the rate of profit when it has, in fact, been rising continuously for more than fifteen years. The turnaround effectively dates from 1981–82: since this date, the rate of profit has increased by 43 per cent in the United States, and by 32 per cent in Europe (see Figures 1 and 2). The profile in these two great zones of the world economy is fairly similar in the final analysis. It is only in Japan that the rate of profit has resumed falling in the 1990s, after having started to rise in the 1980s.

The big difference between the United States and Europe resides in the modalities of this development, which can be studied starting from a simple breakdown of the rate of profit as the product of two variables. The first is the share of profit in the product, which represents an approximation of the rate of exploitation. The second is capital efficiency which relates the product to net capital. This second variable is measured at current prices, in such a manner that it is not purely 'technological'. The difficulties involved in this kind of comparative work should not be underestimated, and the analysis undoubtedly requires further refinement. But it offers a remarkable insight into the relative contribution of these two factors, strikingly visualised in Figures 1 and 2.

Figure 1. The rate of profit in the US

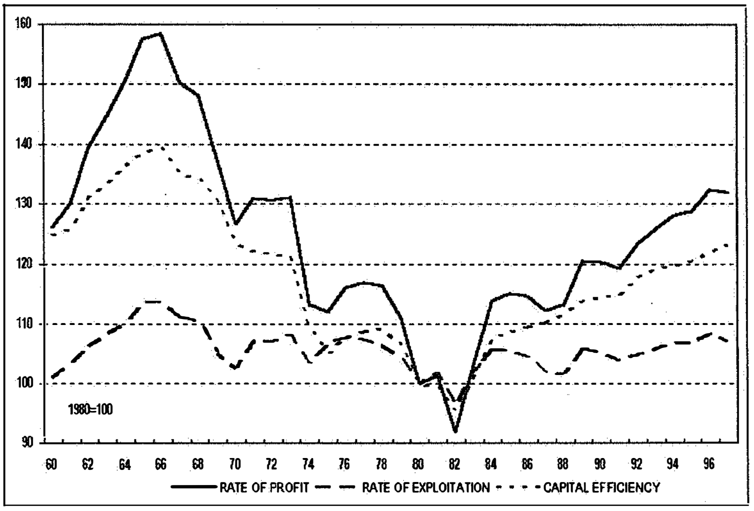


Figure 2. The rate of profit in Europe

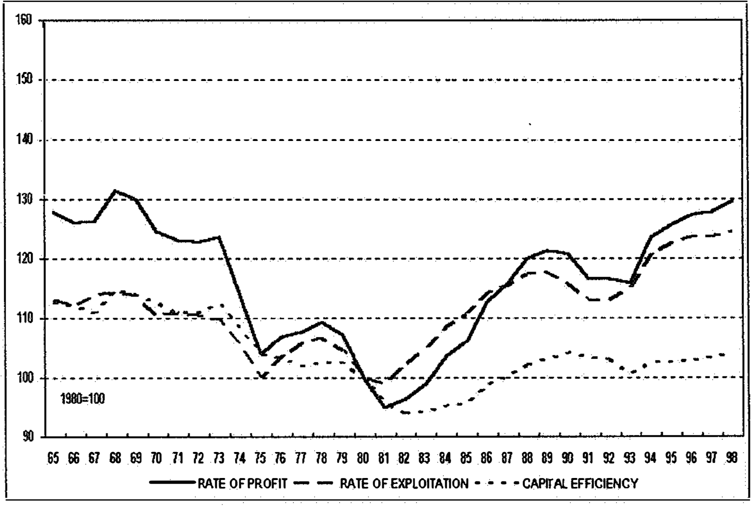


Table 2. Contributions to the evolution of the rate of profit

		1965–1982 (fall)	1982–1997 (rise)
USA	Exploitation	29 %	29 %
	Capital efficiency	71 %	71 %
Europe	Exploitation	36 %	69 %
	Capital efficiency	64 %	31 %

Sources: Duménil and Lévy, OECD[7]

The first result concerns the stability of the mix between exploitation and capital efficiency: coincidentally, it is perfectly constant in the United States and shows the preponderance, both in upwards and downwards movement, of the contribution of capital efficiency (see Table 2). The Figures do not qualitatively differ in Europe during the phase of a falling rate of profit (1965–1982). In both cases, this latter is accounted for at roughly one third by the rate of exploitation and two thirds by capital efficiency. This partly confirms Brenner's assertions as to the determinant role of this second element.

However, the story is a completely different one so far as the phase of re-establishment of the rate of profit (1982–1997) is concerned. While the proportions remain identical in the United States, they are reversed in Europe, where the re-establishment of the rate of profit is predominantly accounted for by an increase in the rate of exploitation. Japan presents a different scenario: the heavy fall in the rate of profit between 1965 and 1982 can be accounted for in almost equal proportions by the rate of exploitation and capital efficiency. Over the recent period, the rate of profit has remained virtually constant.

This differentiation allows us to sharpen our examination of the rate of profit on the basis of a compound breakdown which should be substituted for that which has just been used. In the field of Marxism, the binary breakdown of the rate of profit stems from the classic formula of the rate of profit which depends on the rate of exploitation and the organic composition of capital. But these two latter magnitudes are not separable, given that both are dependent on the productivity of labour. In isolating this component, a double determination becomes apparent: (i) the rate of exploitation depends on the relative evolution of wages and the productivity of labour;

[7] For Europe (Germany, France, United Kingdom, Italy, Spain) the Figures are based on OECD 1998. For the United States, we have used Duménil and Lévy's Figures. See Duménil and Lévy 1994 or www.cepremap.cnrs.fr/~levy/uslt4.pdf.

(ii) capital efficiency depends on the relative evolution of capital per head and the productivity of labour.

It is then possible to shed some light on the differentiation between the United States and Europe (see Table 3). This does not depend essentially on the growth of wages, which is contained in the same fashion in both zones, but principally on the conditions of production which can be summed up thus: in Europe, capital per head increases nearly three times more quickly than in the United States but leads to productivity gains superior only by half. In these conditions, the increase in the rate of profit is lower in Europe, and necessitates a significant transfer of the division of value added – in other words, an increase in the rate of exploitation.

Table 3. The determinants of the rate of profit 1982–1997

	USA	Europe
Capital per head	0.7 %	1.9 %
Productivity	1.2 %	1.7 %
Real wages	0.8 %	1.0 %
Rate of profit	2.4 %	1.9 %

Rate of average annual growth 1982–1997

This compound breakdown of the rate of profit allows us, then, to distinguish three principal magnitudes, namely real wages, the productivity of labour (product per head) and the composition of capital (capital per head). It is, then, the interactive evolution of these three magnitudes which determines the evolution of the rate of profit. What are the principal logics of this interaction? Three can be distinguished: the function of production; the extent of the market; and the wage norm. I have chosen to describe these three concepts in terms borrowed from paradigms foreign to Marxism to underline the fact that Marxism also must take different aspects into account.

The function of production in reality brings together two essential performances, situated at the intersection of technology and social relations. The first part is socio-technical: it describes the return, in the form of productivity, on the intensification of capital. The manner in which a supplement of capital per head increases or does not increase the productivity of labour is a key variable of the analysis of the rate of profit. On this point, Brenner confuses two things in the relations between accumulation and productivity. One of his essential theses is indeed that the evolution of productivity could not be an autonomous factor in the evolution of the rate of profit, because it results from the accumulation of capital, itself dictated by the rate of profit. The downturn in productivity would then be the effect and not the cause of the fall in the rate of profit.

This argument is not entirely correct, and it is even contradictory with Brenner's emphasis on the preponderant role of the increased weight of capital. He forgets that the accumulation-productivity relationship can change form and that this is where the whole difficulty is located. The chronological argument according to which movements in productivity can follow and not precede movements in the rate of profit cannot suffice to establish or invalidate a necessarily structural causality.[8]

This can be illustrated without algebraic formalism. If a quantity of capital per head always produces the same quantity of productivity of labour, the accumulation-productivity link (and nobody would dream of denying the existence of such a link) would be constant. But if the 'return' on accumulation is decreasing from the point of view of the productivity of labour, then this manifests itself by a fall in the efficiency of capital, or in other words of the product per unit of fixed capital. This fall took place in the 1970s and played a significant role in the fall in the rate of profit, as Brenner points out. But this amounts to saying that the accumulation-productivity link breaks down and that the downturn in productivity is in this sense an autonomous component of the fall in the rate of profit. Any explanation of this exhaustion of productivity gains must combine a technological approach (the saturation of the Taylorist paradigm) and a social dimension – that of workers' resistance to the intensification of their exploitation. Brenner is so preoccupied by his polemic with the theory of profit squeeze that he denies the autonomy of the function of production and makes productivity into a guaranteed and in some way passive by-product of the accumulation of capital.

Any explanation must then describe the reaction of capitalists to the raising of wages in the form of an acceleration of capital per head: this process is not formally different from what the neoclassicals call substitution but it is perfectly compatible with Marxist analysis. This is, for example, what Duménil and Lévy have done in their study of American capitalism.[9] This interaction between wages and forms of accumulation is underestimated by Brenner who only considers the influence of wages on the division of value added.

The extent of the market represents a nod to Adam Smith and also to 'Kaldor's law'. The idea is the following: there is a link between growth of product and that of productivity which means

[8] This argument plays a central role in Webber and Rigby 1996.
[9] Duménil and Lévy 1996.

that the gains in productivity linked to a given rate of accumulation will only become effective when they are supported by significant market growth. This is the important lesson of a fine sectoral study covering three European countries, France, Germany and the United Kingdom.[10] It clearly establishes a link between productivity performances and the growth of the scale of production at the level of a comparison between branches of manufacturing industry. The model proposed insists on the necessity of combining the factors of supply and demand to explain productivity; this latter depends not only on capital per head but also on the scale of production, hence on the conditions of demand. Thus it is not possible to separate the sphere of production from that of social demand, even to analyse the most fundamental conditions of production. It is in this sense that the rate of profit is a synthetic indicator, because it reflects, notably through variations in the productivity of labour, the conditions of demand.

The wage norm has a double content. On the one hand it describes the formation of the wage as a function of the evolution of productivity. From this point of view, the functioning of capitalism in Europe has undergone a significant transformation of reference. During the expansionary phase, the norm of wage increases was indexation on the productivity of labour, which is one of the principal elements defining 'Fordism'. But since the beginning of the 1980s a new norm has gradually been generalised, that of zero growth in real wages. Thus wages become delinked from productivity gains, which are almost entirely devoted to the increase in the rate of profit. This fundamental transformation cannot be ignored, yet Brenner can be accused of doing so because he is too focused on the United States.

These three articulations – function of production, extent of the market and wage norm – contribute to defining the rate of profit not only as a measure of the profitability of capital but as a synthetic indicator of the coherence of its functioning. This approach is inspired by that of Mandel, who distinguishes the following six 'partially independent variables': (1) the organic composition of capital in general and in the two departments; (2) the division of constant capital between fixed and variable capital; (3) the development of the rate of surplus-value; (4) the development of the rate of accumulation (the relationship between productively and unproductively consumed surplus-value); (5) the duration of the capital renewal cycle; and (6) the terms of exchange between the two departments. The thesis that Mandel upholds is that:

[10] Husson 1999.

> the history of capitalism, and at the same time the history of its inner regularities and unfolding contradictions, can only be explained and understood as a function of the interplay of these six variables. Fluctuations in the rate of profit are the seismograph of this history, since they express most clearly the result of this interplay.[11]

This definition of the rate of profit is at the heart of crisis theories.

Conceptions of the crisis

A theory of crisis should meet three criteria. It must allow an understanding of the post-war phase of expansion, and the subsequent turn which put an end to it. But it should also account for the non-exit from the recessionary phase which has succeeded it. As a minimal logical demand one should also expect that these different aspects are articulated in a coherent manner, not by leaping from one theoretical schema to another to explain different phases. From this point of view, an examination of the available theories of the crisis reveals an impossible unidimensionality in explanation: in other words, most schemas can explain one part of the problem posed, but not the other. Most of the plausible explanations of the turnaround cannot adequately account for the failure to emerge from crisis. Let us rapidly review them.

There is first what could be called the quantitative theory of the rate of profit. This latter is not considered as a synthetic variable but as a threshold indicator. Below a certain value, the rate of profit implies recession, and it is only after the crossing of a certain threshold that accumulation can recommence. This account is demolished by the configuration extant for about 15 years, namely that of a re-establishment of the rate of profit which has not set accumulation in motion. Short of positing some idealised magical value of the rate of profit which has not yet been attained, it is not clear why this re-establishment of the rate of profit generates so little in terms of accumulation. Such a representation basically ignores the synthetic nature of the rate of profit – in other words the fact that the manner in which profitability is re-established also counts, perhaps as much as the level attained. The impact of a restoration in

[11] Mandel 1975, p. 39.

the rate of profit will obviously differ according to whether it is based on a lasting suppression of demand or a leap forward in productivity.

To take account of the limits of this approach, a Marxist theory of financial parasitism has recently developed. The accent put on financialisation seeks to explain why accumulation has not resumed despite a higher rate of profit. According to this account, the rate of profit increases but is eaten away by financial capital, in such a manner that the 'true' rate of profit is insufficient. This interpretation manifestly confuses the extraction of surplus-value and its distribution, effect and cause, and thus question and answer. The phenomenon to explain – the question posed – is the growth of non-accumulated surplus-value. The answer cannot be that this growth is explained by that of the financial sphere, which is a modality of redistribution of surplus-value. In my view, the opposite is the case: the growth of the financial sphere is explained by that of non-accumulated surplus-value. This inversion of the direction of causality leads to financialisation being presented as a leakage from global profit, preventing it from being invested productively, and not as a mode of distribution of this surplus-value. Where does the value extracted through the process of exploitation go? In the subtractive version of financialisation, it appears to vanish into a 'speculative sphere' detached from the cycle of capital. In the materialist version, it is redistributed through complicated circuits of growth to be finally consumed by the holders of financial incomes. On a more theoretical plane, these two symmetrical approaches to finance correspond to two theories of value and of profit. The first is additive, in the sense that global profit is the sum of its incarnations – industrial profit on the one hand and financial profit on the other – which could provide the basis of a fashionable 'portfolio theory': the rate of accumulation is weak because, with financial profit being superior to industrial profit, capitalists prefer speculation to investment. This critique of capitalism is undoubtedly popular, but on a very formalist basis, for it rests on a veritable fetishism of finance according to which the stock exchange is a means of creating value in the same manner as the exploitation of labour.[12] Brenner does not refer to it much in his account except in the following ambiguous formula. 'The other side of capitalists' refusal to place much of their capital in production was their search for alternative ways to make money' (p. 207).

What might be called Keynesian Marxism represents the shadow thrown by this orthodoxy of the rate of profit. The basis on which it is constructed is the idea that blocked markets are the essential cause of low growth and mass unemployment. But Keynesian reflationary

[12] For a more detailed critique, see Husson 1997.

policies come up against an unfavourable policy mix because of high interest rates. Here, again, the order of causality and chronology is reversed. The hiking up of interest rates coincided with the resolute application of neoliberal policies in the early 1980s and did not constitute an identifiable factor in the entry into crisis. But this sharp hike in interest rates did not fall from the sky. It must be interpreted as a variable of fundamental adjustment, charged with ensuring that the demand is adequate to the new modalities of supply. Faced with threats of a major world recession founded on a universal freezing of wages, the raising of interest rates had as its principal function the assuring of the transfers necessary to the emergence of a 'third demand'. The first transfer is inter-social: the raising of interest rates is a means of redistributing a growing fraction of national income towards the holders of financial assets. The second transfer is geographical and assures a flow of financing of the twin US deficits. In the process, an enormous withdrawal from the countries of the South is effected through the debt crisis. Keynesian Marxism forgets this genesis and also inverts the determinations in suggesting that emergence from crisis is conditional on a prior fall in interest rates. In fact, interest rates have already fallen considerably and this has nonetheless not led to a resumption of accumulation. A supplementary explanation is needed, then, for the persistence of low growth rates. In short, none of these approaches succeeds fully in explaining the passage from one phase to the other inside the long wave and the stretching out over time of its recessionary side.

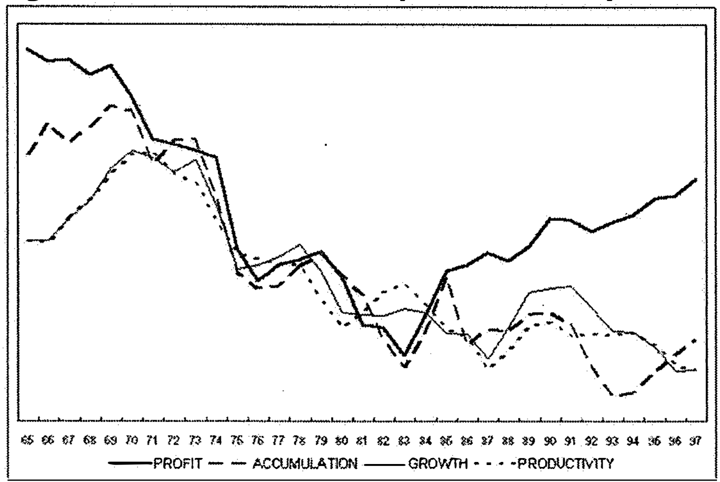
The productivity-accumulation loop

Brenner systematically criticises the regulationists for allocating a central role to the downturn in productivity, and in this respect he holds to a position defended in a preceding contribution.[13] The principal argument, which is that the dowturn in productivity follows that of accumulation, is not sufficient to carry conviction. Rather than confining oneself to a partial liaison between two variables, it is preferable to pose the problem in more global terms. Reference to Figure 3 should help here. It clearly brings out the two phases of the long wave, through four curves tracing the evolution of magnitudes calculated for seven capitalist countries: the US, Japan, the UK, France, Italy, Germany and Spain. It can be seen that three of these variables evolve in a very parallel manner, passing from high values

[13] Brenner and Glick 1991.

before 1970 to much lower levels: there is then a simultaneous slowing down of growth, productivity and accumulation. It would moreover be possible to add inflation and the inverse of the rate of unemployment which would follow an identical profile.

Figure 3. The curves of the capitalist economy.



This simultaneity means it is not possible to isolate 'effects' and 'causes' and leads us to propose a schema of structural determination of productivity illustrated by Figure 4. The point of departure is that there exists a significant potential for productivity gains associated with the amount of investment that can be located at the level of the final phase of production, whether it amounts to goods or services (Liaison 1). But this liaison is only partial and it is insufficient to account for the totality of relations between capital accumulation and productivity.

It has already been indicated that the same amount of investment can generate more or higher productivity gains. This 'return' on accumulation contributes then to the determination of capital efficiency (Liaison 2). The relative evolution of labour productivity and capital efficiency determines performance in terms of total factor productivity (Liaison 3). It can be shown that it is the relative evolution of this total factor productivity in relation to that of real wages which in turn determines the evolution of the rate of profit (Liaisons 4 and 5).[14]

This last Liaison 5 between wages and rate of profit introduces a feedback effect: any objective of maintenance or re-establishment of

[14] Husson 1996.

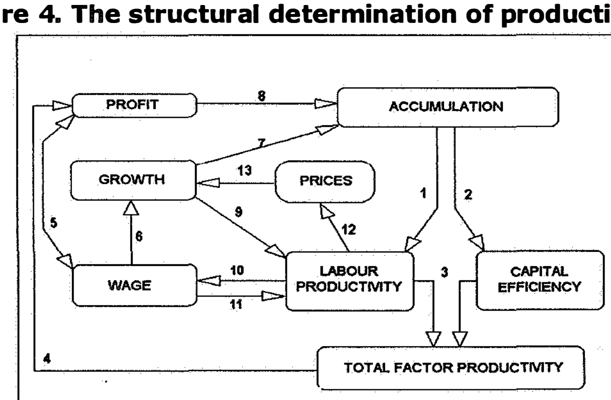
the rate of profit expresses itself – at the global productivity of the given factors – as the fixing of an objective of maximum progression of wages.

The objective thus defined from the point of view of the progression of wages will contribute – averaging diverse intermediaries (rate of saving, dynamism of non-wage incomes) – to determining the progression of the product, according to global effective demand (Liaison 6). The progression of demand in turn introduces an effect on the dynamic of investment (Liaison 7). In the same way, the evolution of the rate of profit comes to influence capital formation (Liaison 8). There is then a double determination of accumulation according to elements of demand and conditions of profitability.

The so-called Kaldor-Verdoorn law introduces a complementary liaison between growth and labour productivity (Liaison 9), while the evolution of labour productivity will contribute, notably at the sectoral level, to determining that of real wages (Liaison 10). An inverse relation can also operate, to the extent that the evolution of wages will partly determine that of labour productivity: this is Liaison 11, which also goes through the determination of the very form of the investment.

Productivity and its sectoral profile contribute strongly to the determination of relative prices (Liaison 12) which in turn contributes to determining the dynamism and sectoral orientation of growth (Liaison 13). The price elasticity of consumption is a powerful means of orientation of demand towards the high productivity sectors and can thus contribute to the establishment of a virtuous circle. This schema has to be considered in its totality in order to grasp the recent history of the capitalist dynamic.

Figure 4. The structural determination of productivity



The passage between phases

How can the passage between phases be explained? In order to answer this question, it is necessary to reconcile concrete history with theoretical schemas, integrating both the possibility of phases of expansion and the inescapability of periodic crises. This articulation is extremely complex, because theories which are 'too good' should be avoided. Thus there are some 'catastrophist' readings which explain the crisis so well that it is hard to see why it is not permanent; on the other hand, there are 'harmonicist' approaches which raise the question of how such a well-oiled mechanism has ever gone off the rails. Theoretical formulations should not be expected to provide a universal and atemporal interpretation, applicable to all crisis situations, for this would amount to a denial of their historic dimension. Brenner cannot be rebuked for this – his study is a rich contribution to the concrete history of capitalism. But his unicausal theoretical schema does not entirely satisfactorily account for the passage from one phase to the other.

This tension between chronology and theory introduces a fundamental difference between the structural causes of the crisis and the sudden forms in which it appears. It could easily be demonstrated that the place where the crisis breaks out always involves a 'false culprit', a superficial causality. In 1973–74, an 'oil shock' was immediately identified as the culprit, lightly confusing a direct factor of the entry into recession with its deep-rooted causes. The stock exchanges are privileged sites for the emergence of crises, not because the financial dimension is the most important, but because they represent the natural arena where the necessity for a violent devalorisation of capital is resolved. This problem of interpretation exists also inside the Marxist tradition: how, and under what conditions, can a tendency like that of the fall in the rate of profit engender periodic crashes? A similar difficulty is expressed in the variety of meanings the term 'crisis' can have; it is applied equally to the sudden shock of the crash and to durable and lasting crises. Three theoretical insights are useful here: the accumulation of contradictions, the reversal of virtuous circles, the distinction between long-term and short-term variables.

The first insight useful to a reading of the crisis is that of the accumulation of tensions. It might be useful here to adopt the image of a dam which gives way: the catastrophe is very immediate but it is the result of a slow process of erosion. The first breach can be minuscule, but it unleashes a process of qualitative transformation which provokes an imbalance which is transformed into a rupture. Where the first fissure is produced is irrelevant: its localisation does not give any indication about causality. To sharpen the metaphor, Mandel's position on post-war capitalism amounts to an observation of the barrage before it gives way and a demonstration of why it has held until then, and why it cannot resist the pressures which have accumulated. The omission of any one of the terms of this prognostic leads to a unilateral discourse which can easily be criticised. This explains why Mandel has been subjected to contradictory critiques, with defenders of dogma attributing to him the thesis that capitalism had resolved its contradictions, and others rebuking him for permanently anticipating the collapse of the system.

The second factor to note is how virtuous mechanisms can be progressively transformed into their opposites to become in a sense accelerators of contradiction. Thus inflation has some advantages for the financing of capital, but it also comes up against contradictions in time, until it becomes transformed into its opposite, namely an obstacle to the capitalist management of the crisis. Inflation played a central role in the analyses of post-war capitalism, but it was also around the slogan of the struggle against inflation that the turn to neoliberalism was carried through, the real objective obviously being the imposition of wage austerity as a new norm. In order to do this, it was necessary to dispense with this instrument of regulation, which had become an obstacle to the implementation of policies to emerge from the crisis. The same reasoning was applied to social expenditure or, more recently, to military expenditure. While everybody agreed on the anti-recessionary impact of these expenditures, Mandel was one of the rare theorists to grasp the contradictory dimension, namely the growing weight that they represented in the formation of profit.

Finally, a distinction should be observed between long- and short-term variables. The passage from expansionary to recessionary long wave can only be understood by a modification of the overall capitalist configuration. Mandel proposes analysing this on the basis of a combination of the 'partially independent variables' mentioned above. Indeed, none of these variables will reverse themselves sharply, which leads to the following, in my view fundamental, remark. The crisis, as rupture, reveals itself through the sudden fall of certain variables. But a durable crisis can only be explained by structural variables which evolve at a different rhythm. The generalised recession of 1974–75 ended the period of expansion. As sudden recession, it cannot be directly explained by tendential variations in productivity, still less by slow evolutions of the structure of social demand. Nonetheless it is these slow, subterranean, tectonic movements, which lead to crisis and above all to non-exit from crisis, even if this takes the concrete form of the eruption, the earthquake or the tidal wave. An account of crises and a historic analysis of long waves presupposes then a grasp of the 'discordance of temporalities' to take up Daniel Bensaïd's excellent and not entirely metaphorical expression.[15]

For an alternative reading

The major economic problem posed by contemporary capitalism is fully illustrated by Figure 4. Until the beginning of the 1980s, the evolution of the rate of profit faithfully follows that of the other strategic variables, namely the rate of accumulation, the rate of growth and the rate of growth of productivity. Their simultaneous decline reflects the overall crisis which struck capitalism in the middle of the 1970s. After a brief Keynesian parenthesis from 1975 to 1980, the current neoliberal phase began, characterised by a growing disconnection between the rate of profit, which re-establishes itself tendentially, and the other variables which continue to stagnate. In other words, contemporary capitalism is characterised by a novel configuration which combines high levels of profitability and mediocre performances in the areas of productivity and growth. One can relativise or challenge this assessment by discussing the pertinence of statistics, or by arguing that it is the leakage exerted by finance which reduces the 'right' rate of profit. But these correctives cannot modify qualitatively the facts that have to be explained.[16]

A complementary problematic is that of Solow's paradox. 'You can see the computer age everywhere but in the productivity statistics'.[17] Independently even of the volume of capital accumulated, very profound transformations have taken place in the conditions of production as well as in the organisation of wage-labour. Indeed, this is not reflected in productivity gains and the re-establishment of the rate of profit has not been brought about, as has been seen, through a leap forward in productivity. All these characteristics designate a relatively original configuration in the history of capitalism.

Attempts to resolve Solow's paradox highlight the role of productivity as key variable. The interpretation suggested by a fine

[15] Bensaïd 1995. This reflection also owes a lot to the magisterial work by Francisco Louçã 1997.
[16] For a more developed argument, see Husson 1997 and Husson 1999.
[17] Solow 1987.

sectoral analysis underlines the contradictory factors weighing on the current situation. It might be assumed that latent autonomous technical progress exists, accompanied by potential important productivity gains. But the mobilisation of these potentialities comes up against a triple limit: (i) the insufficiency of accumulation represents a brake on the diffusion of new equipment and the rapid rejuvenation of capital stock; (ii) the growing overlap between industry and services at the very heart of the productive apparatus could continue durably to drag down overall productivity performances; (iii) the insufficient dynamism of demand reinforces the preceding effect and adds to it a specific factor of a lack of fit between markets and productive supply, both through a fall in the price elasticity of demand of new products, and through displacement of social demand towards lower productivity services.

No technological potential can be fully realised if the social conditions of this realisation are lacking: the existence of a solvent demand, and its adequacy to the dynamic of social needs. This dual condition is overlooked by the Keynesian explanation of stagnation; the volume of effective demand is not sufficient, it is also necessary that it is directed towards the 'right' industries, from the point of view of associated profitability. Thus, the paradoxes of productivity basically originate from an over-rapid assimilation between technical performance and social productivity of labour.

Consequently, the task is that of locating a crisis which challenges the capitalist mode of recognition of social needs and takes the form of a fundamental disadjustment between social demand and technical progress. Technical progress is concentrated in sectors which are not priorities from the point of view of social demand. This gap is structural – to a great degree irreversible – and leads to the following contradiction: any increase in the wage mass is certainly re-injected into the economic circuit, but not in the right place. In other words, it is not directed towards the markets of the sectors with high virtual productivity gains and flows, or tries to flow, principally towards the low productivity sectors. This is one of the basic reasons why strong growth has failed to resume in spite of the re-establishment of the rate of profit.

This reading of the crisis sheds some light in a retroactive manner on the trajectory of the capitalist economy over the past half-century. The underlying movement is that which modifies social demand and the diversion from manufactured goods with which significant productivity gains are associated towards a demand for services which are often collective and unlikely to be satisfied in the form of commodities like the automobile. To the extent that the satisfaction of these needs would weigh on the profitability of capital, they are treated as a constraint and thus satisfied on the most narrow basis possible. And, as the social needs emanating from a good deal of the poorer section of humanity fall into this category, we are witnessing a gigantic denial of production on the world scale: better not to produce than to produce below the norm of profit. Such a process takes place obviously in the framework of long-term structural transformations and thus cannot be called upon as an explanation for the outbreak of crisis. But it is this process which underlies the great transition towards a capitalism which accumulates little and deepens inequalities. It brings to mind the most radical dimension of the critique developed by Marx, who was not content to highlight the difficulties of regulating capitalism, but also anticipated a regressive functioning. One of the most modern passages of this critique, which brings to mind the current debate on the end of work, is found in the *Grundrisse* and is worth quoting at length.

> The theft of alien labour time, on which the present wealth is based, appears a miserable foundation in face of this new one, created by large-scale industry itself. As soon as labour in the direct form has ceased to be the great well-spring of wealth, labour time ceases and must cease to be its measure, and hence exchange-value [must cease to be the measure] of use-value. The surplus labour of the mass has ceased to be the condition for the development of general wealth, just as the non-labour of the few, for the development of the general powers of the human head. With that, production based on exchange-value breaks down, and the direct, material production process is stripped of the form of penury and antithesis. The free development of individualities, and hence not the reduction of necessary labour time so as to posit surplus-labour, but rather the general reduction of the necessary labour of society to a minimum, which then corresponds to the artistic, scientific, etc. development of the individuals in the time set free, and with the means created, for all of them. Capital itself is the moving contradiction, [in] that it presses to reduce labour time to a minimum, while it posits labour time, on the other side, as sole measure and source of wealth. Hence it diminishes labour time in the necessary form so as to increase it in the superfluous form; hence posits the superfluous in growing measure as a condition – question of life or death – for the necessary. On the one side, then, it calls to life all the powers of science and of nature, as of social combination and of social intercourse, in order to make the creation of wealth independent (relatively) of the labour time employed on it.

> On the other side, it wants to use labour time as the measuring rod for the giant social forces thereby created, and to confine them within the limits required to maintain the already created value as value. Forces of production and social relations – two different sides of the development of the social individual – appear to capital as mere means, and are merely means for it to produce on its limited foundation. In fact, however, they are the material conditions to blow this foundation sky-high.[18]

Brenner's position falls short of this interpretation at the level of the management of the internal contradictions of capital. His major contribution principally concerns the international dimension. Any interpretation of the crisis must indeed confront the particular history of each national capitalism, as well as the structuring of the world economy. Brenner rightly insists on the inter-capitalist contradictions, but tends to underestimate the effects of globalisation, which accentuate the functioning of the model described here by progressively installing a single world determination of socially necessary labour. Regardless of where you are on the planet, no need can be satisfied if this satisfaction does not fall into line with the performances of the most competitive countries and industries. Such is the rule currently being established, on which all the capitalist competitors are agreed, and which does not result solely from economic mechanisms. On the contrary, it can be said that the institutions of world capitalism are intervening consciously to create this world market, and Brenner does not stress this aspect sufficiently.

The priority Brenner gives to inter-capitalist relations also has the inconvenience of relativising the weight of fundamental social relations. From this point of view, he could be subjected to the same critique that he himself made of the regulationists, who he reproached precisely for ignoring the fundamental capital-labour relation. For it is this latter that is in crisis, and this crisis, rather than a crisis of regulation, is a systemic one. Brenner, like the regulationists, but for obviously different reasons, underestimates the depth of the current crisis, without for all that falling into the permanent harmonicist failings of this school.

Any interpretation of the crisis which is put forward has implications for the means of getting out of it. For example, in a perhaps unhelpfully polemical critique, Andy Kilmister argues that

[18] Marx 1973, pp. 705-6.

> The most obvious political conclusion that can be drawn from Brenner's work is a reformist one – the USA, EU and Japan should jointly agree to co-ordinate their production and share out markets more equitably.[19]

Is this assertion really unjust? It corresponds well enough to the last chapter of Brenner's work, where he examines the different possible evolutions of world capitalism. The principal parameters he chooses to discuss are indeed of the technological order – are we heading towards a high-tech cycle in the United States? – or geopolitical: is a world economic settlement possible or will we be plunged into a brutal new recession caused by the synchronisation of austerity policies, in other words, by absence of co-ordination ?

Perhaps this is a European point of view, but the depth and the duration of the crisis seem to us to raise another question which concerns the possible reproduction of capitalist legitimacy. Can this system function in a lasting manner on the basis of this unstable coherence which openly decrees the inevitability of social regression?

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[19] Kilmister 1999.

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